

## INTERNATIONAL SEARCH REPORT

Application No PCT/NL2004/000748
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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A23L1/29 A23L1/30 A61K31/733 A61K31/702 A61K35/74  
A61P37/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A23L A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, FSTA, PAJ, BIOSIS, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 904 784 A (NUTRICIA NV) 31 March 1999 (1999-03-31) paragraphs [0022], [0023], [0039] - [0042], [0045], [0052], [0058] - [0064]; claims 1-6; examples 1-5,7 -----	1-18
Y	DE 198 36 339 A (NUTRICIA NV) 24 February 2000 (2000-02-24) the whole document -----	1-18
Y	EP 1 175 905 A (NESTLE SA) 30 January 2002 (2002-01-30) paragraphs [0022] - [0025], [0029], [0030]; claims; examples ----- -/-	1-18

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

23 February 2005

Date of mailing of the International search report

10.06.2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DE 102 06 995 A (ORTHOMOL PHARMAZEUTISCHE VERTR) 4 September 2003 (2003-09-04) page 2, paragraphs 1,8-17,33-38; claims 1-4,11-17 -----	1-18
Y	DE 100 08 279 A (MEGGLE GMBH) 30 August 2001 (2001-08-30) column 2, line 34 - column 5, line 25; claims; example 1 -----	1-18
Y	EP 0 856 259 A (SITIA YOMO SPA) 5 August 1998 (1998-08-05) column 2, line 27 - column 7, line 23; claims 1-11; example 2 -----	1-18
Y	US 2003/031659 A1 (FARMER SEAN) 13 February 2003 (2003-02-13) paragraph [0096] - paragraph [0101]; claims 1,5,10.,18,19,102,106,112-116 -----	1-18
Y	US 2002/015990 A1 (NAKAMURA HIROHIKO ET AL) 7 February 2002 (2002-02-07) paragraphs [0046] - [0076]; claims; examples 2-5 -----	1-18
Y	WO 03/013559 A (HOKKAIDO TECHNOLOGY LICENSING ; HUKUMORI YASUNORI (JP); NIPPON BEET SU) 20 February 2003 (2003-02-20) the whole document & EP 1 421 945 A (HOKKAIDO TECHNOLOGY LICENSING ; NIPPON BEET SUGAR MFG (JP); HOKUREN (J) 26 May 2004 (2004-05-26) paragraphs [0013], [0014], [0021] - [0030]; claims; example 8 -----	1-18
Y	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 02, 26 February 1999 (1999-02-26) & JP 10 309178 A (WAKAMOTO PHARMACEUT CO LTD), 24 November 1998 (1998-11-24) abstract -----	1-18
Y	FAMULARO G ET AL: "TRADITIONAL AND HIGH POTENCY PROBIOTIC PREPARATIONS FOR ORAL BACTERIOTHERAPY" BIODRUGS, AUCKLAND, NZ, vol. 12, no. 6, 1999, pages 455-470, XP009001219 ISSN: 1173-8804 page 459, column 1, paragraph 3 - column 2, paragraph 1 page 468, column 1, paragraph 2 - paragraph 3 ----- -/-	1-18

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	MORO G ET AL: "Dosage-Related Bifidogenic Effects of Galacto- and Fructooligosaccharides in Formula-Fed Term Infants" JOURNAL OF PEDIATRIC GASTROENTEROLOGY AND NUTRITION, RAVEN PRESS, NEW YORK, NY, US, vol. 34, no. 3, March 2002 (2002-03), pages 291-295, XP008029577 ISSN: 0277-2116 cited in the application page 291 page 292 page 295 -----	1-18
Y	MORISHITA Y ET AL: "Galactooligosaccharide in combination with Bifidobacterium and Bacteroides affects the population of Clostridium perfringens in the intestine of gnotobiotic mice." NUTRITION RESEARCH, vol. 22, no. 11, November 2002 (2002-11), pages 1333-1341, XP002295913 ISSN: 0271-5317 page 1338, paragraph 2 -----	1-18
Y	ISOLAURI E ET AL: "PROBIOTICS IN THE MANAGEMENT OF ATOPIC ECZEMA" CLINICAL AND EXPERIMENTAL ALLERGY, BLACKWELL SCIENTIFIC PUBLICATIONS, LONDON, GB, vol. 30, November 2000 (2000-11), pages 1604-1610, XP001064231 ISSN: 0954-7894 page 1608 -----	1-18
Y	ISOLAURI E ET AL: "PROBIOTICS: EFFECTS ON IMMUNITY" AMERICAN JOURNAL OF CLINICAL NUTRITION, BETHESDA, MD, US, vol. 73, no. SUPPL, February 2001 (2001-02), pages 444S-450S, XP000984966 ISSN: 0002-9165 page 448S, paragraph 2 -----	1-18
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KANAMORI YUTAKA ET AL: "Combination therapy with <i>Bifidobacterium breve</i> , <i>Lactobacillus casei</i> , and galactooligosaccharides dramatically improved the intestinal function in a girl with short bowel syndrome: A novel synbiotics therapy for intestinal failure" DIGESTIVE DISEASES AND SCIENCES, vol. 46, no. 9, September 2001 (2001-09), pages 2010-2016, XP009036227 ISSN: 0163-2116 page 2011 page 2015; table 1 -----	1-18
A	LAMOUREUX L ET AL: "PRODUCTION OF OLIGOSACCHARIDES IN YOGHURT CONTAINING BIFIDOBACTERIA AND YOGURT CULTURES" JOURNAL OF DAIRY SCIENCE, AMERICAN DAIRY SCIENCE ASSOCIATION, CHAMPAIGN, ILLINOIS, US, vol. 85, no. 5, May 2002 (2002-05), pages 1058-1069, XP001124200 ISSN: 0022-0302 page 1068, column 1, paragraph 2 - column 2 -----	

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### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: **18 (part)**  
because they relate to subject matter not required to be searched by this Authority, namely:  
**Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy**
2.  Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-18

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-18

A preparation comprising *Bifidobacterium breve* and at least two non-digestible soluble carbohydrate components.  
Infant nutrition comprising such preparations and their use for the manufacture of compositions for the prevention and treatment of gastro-intestinal and immune disorders.

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2. claims: 19-25

Oligonucleotide probes for specifically detecting species of the genus *Bifidobacterium*: the oligonucleotide sequences, the labelled oligonucleotide probes, methods of detecting or quantifying the species, diagnostic kits.

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